

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 2, 10, 11, 15, 18, 26, 32, 43, 47 and 48.

Please cancel claims 30 and 50.

The following listing of claims replaces all version, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) An in vivo sensing system comprising:
 - a housing; comprising:
 - at least one imaging device that is freely movable within the housing in any rotational direction without being mounted to the housing;
 - at least one directional activator within said imaging device; and
 - at least one friction reducing mechanism disposed between said housing and said imaging device to permit free movement of said imaging device within said housing; and
 - at least one directional actuator external to said housing to control said at least one directional activator so as to change the orientation of said imaging device to any direction with respect to said housing.
2. (Previously Presented) The in vivo sensing system according to claim 1 wherein the housing includes a material selected from a group consisting of: glass, plastic, and rubber.
3. (Original) The in vivo sensing system according to claim 1 wherein the housing has a shape selected from a group consisting of: spherical shape, capsule shape, and ovoid shape.
4. (Original) The in vivo sensing system according to claim 1 wherein the housing is collapsible.
5. (Original) The in vivo sensing system according to claim 4 wherein the housing includes at least a semi-permeable membrane.

6. (Previously Presented) The in vivo sensing system according to claim 1 wherein said housing comprises a hydrocarbon casing.

7. (Original) The in vivo sensing system according to claim 1 wherein the housing is at least partially transparent.

8. (Original) The in vivo sensing system according to claim 1 wherein the housing comprises at least one attachment mechanism.

9. (Original) The in vivo sensing system according to claim 8 wherein the attachment mechanism comprises at least one constituent selected from the group consisting of: glue, rings, indentations, grooves, fasteners, niche, anchors, suction cups, and clasps.

10. (Previously Presented) The in vivo sensing system according to claim 1 wherein the imaging device has a shape selected from a group consisting of: spherical shape, capsule shape, and ovoid shape.

11. (Previously Presented) The in vivo sensing system according to claim 1 wherein the imaging device has a weight that is evenly distributed along a horizontal and a vertical axis of the sensing device.

12. (Original) The in vivo sensing system according to claim 1 comprising at least one ballast weight.

13. (Canceled)

14. (Previously Presented) The in vivo sensing system according to claim 1, wherein the directional activator comprises at least one magnet, and wherein the directional actuator comprises a magnetic field generator.

APPLICANT(S): IDAN, Gavriel J. et al.
SERIAL NO.: 10/529.735
FILED: March 3, 2005
Page 4

15. (Previously Presented) The in vivo sensing system according to claim 1 wherein the at least one imaging device comprises a magnetic switch configured for controlling at least one electrical component of the sensing device.

16-17. (Canceled)

18. (Previously Presented) The in vivo sensing system according to claim 1 wherein said at least one imaging device comprises at least one sensor selected from the group consisting of: image sensor, blood detection sensor, pH sensor, electrical impedance sensor, pressure sensor, and temperature sensor.

19-23. (Canceled)

24. (Original) The in vivo sensing system according to claim 1 wherein the friction-reducing mechanism includes a liquid.

25. (Original) The in vivo sensing system according to claim 24 wherein the liquid is selected from a group consisting of: water; saline solution; oil, glycerin, and bodily fluid.

26. (Previously Presented) The in vivo sensing system according to claim 24 wherein the imaging device has a specific gravity that does not substantially exceed the specific gravity of the liquid.

27. (Original) The in vivo sensing system according to claim 24 wherein the liquid is introduced into the housing in vivo.

28. (Original) The in vivo sensing system according to claim 24 wherein the liquid has a diffraction coefficient substantially similar to a diffraction coefficient of the housing.

29. (Original) The in vivo sensing system according to claim 24 wherein the liquid is at least partially transparent.

30-31. (Canceled)

32. (Currently Amended) An in vivo imaging system comprising:

an outer covering, said outer covering comprising;

an image sensor that is freely movable within the outer covering in any rotational direction without being mounted to the outer covering, said image sensor comprising at least one directional activator; and

a liquid disposed between the outer covering and the sensor to permit free movement of said imaging device within said outer covering; and

at least one directional actuator external to said outer covering configured to control said at least one directional activator from outside said outer covering so as to change orientation of said image sensor to any direction with respect to said outer covering.

33. (Previously Presented) The in vivo imaging system according to claim 32 wherein the outer covering comprises at least one attachment mechanism selected from the group consisting of: glue, rings, indentations, grooves, fasteners, niche, anchors, suction cups, and clasps.

34-35. (Canceled)

36. (Previously Presented) The in vivo imaging system according to claim 32 wherein the at least one directional activator comprises a magnet, and wherein the at least one directional actuator comprises a magnetic field generator.

37. (Canceled)

38. (Previously Presented) The in vivo imaging system according to claim 32 wherein said image sensor further comprises at least one additional sensor.

39. (Previously Presented) The in vivo imaging system according to claim 38 wherein the at least one additional sensor is selected from the group consisting of: blood detection sensor, pH sensor, electrical impedance sensor, pressure sensor, and temperature sensor.

40. (Original) The in vivo imaging system according to claim 32 comprising a transmitter.

41-42. (Canceled)

43. (Currently Amended) A method for imaging an in vivo site comprising the steps of:
inserting within a body lumen an in-vivo imaging device comprising a magnet, being disposed within a housing so as to be freely movable within the housing in any rotational direction without being mounted thereto, and being surrounded by a friction reducing material within said housing;

changing orientation of said in vivo imaging device to any direction with respect to said housing in a friction-reduced manner by application of an external force to said in-vivo imaging device; and

capturing images from any of said orientations.

44. (Canceled)

45. (Previously Presented) The method according to claim 43 wherein the external force is selected from the group consisting of: electromagnetic force torque generating fields, magnetic torque generating fields, and gravitational force.

46. (Original) The method according to claim 45 wherein applying an external force includes repositioning a patient.

47. (Previously Presented) The method according to claim 43 further comprising the step of: transmitting data from the in vivo imaging device.

APPLICANT(S): IDAN, Gavriel J. et al.
SERIAL NO.: 10/529.735
FILED: March 3, 2005
Page 7

48. (Currently Amended) The method according to claim 43 comprising the steps of: reviewing transmitted data; and applying an external force to change the direction of the imaging device based on the reviewed transmitted data.

49-50. (Canceled)